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EDITORIAL

FONTENELLE AS A POPULARIZER OF SCIENCE

(WITH A VERSION OF HIS DIALOGUES OF MEDICO-
HISTORICAL INTEREST)

Never has the literature of popular science, or, as some will have it, its vulgarization, attained to such an extraordinary proliferation as during the period in which we are now living. Familiarity with the book-stalls or the weekly current lists of new books will convince any one that there must be literally hundreds of popular treatises on evolution, on the descent of man, on eugenics, personal hygiene, first aid, domestic medicine, psychology, psychoanalysis, endocrinology, industrial chemistry, natural history, relativity, and latterly even a few on history of medicine. There are actual specimens of irresponsible improvisation so misleading and inaccurate as to be virtually comic histories of some phase of science or of medicine. Between this *infima species* and that which springs from an honest attempt to convey scientific information in an exact, simple, lucid manner, there must needs be a great gulf fixed; but, as familiarity breeds contempt, the descent to the lower level is none the less facile, and sometimes inevitable.

The cult of popular science had its vague beginnings in the 17th Century, when the scientific society, one of the special creations of the period, was patronized by royalty or the nobility. The Royal Society was chartered by Charles II, who himself dabbled in chemistry. Back of

the Académie des Sciences (Paris) stood Louis XIV, back of the Roman Academy of Lynxes, Count Federigo Cesi, back of the Academy of Experiment of the same city, the Medici, while out of Prince Rupert's laboratory came "Prince's metal" and "Prince Rupert's drop." As the power of the middle classes grew apace, universities, such as those at Leipzig, Halle and Leyden, came to be created by popular *fiat*. The oldest scientific society in Germany, the Leopoldine Academy (1651), which antedates even the Royal Society, was founded, in fact, by a group of medical men. As medical societies increased in number, there was a corresponding increase in the number of medical periodicals. All this was part of the 18th Century program of "enlightenment" by dissemination of knowledge among a cultivated intelligentsia; but, in practice, the old 17th Century tradition still held. The intelligentsia constituted a virtual intellectual despotism, centering in the king, and where science was popularized, it was merely as a kind of pap or predigested food for people of fashion. The more democratic phase came from England and sprang from what has been called the "sublime error" of Anglo-Saxon tradition, the propensity to make one's neighbor better (if possible) than oneself. Faraday is known to have got his youthful incentive to a scientific career from certain "Conversations on Chemistry" (1806) by Mrs. Alexander Marcet, wife of the well known physiological chemist and pioneer authoress of a long row of rudimentary scientific primers for women and children. From all this came Faraday's lecture on The Candle¹; John Tyndall's lectures and "Fragments of Science for Unscientific People" (1871), which ran through six editions; Huxley on Coral, Yeast, A Piece of Chalk and The Descent of Man; perhaps even the phenomenal sale of the entire first edition (1250 copies) of Darwin's Origin of Species on the day of its publication (November 24, 1859). Popular scientific lectures and essays now became the vogue and even Helmholtz, Haeckel, Virchow, Du Bois Reymond, Mach and Ostwald took a hand in a department of literature in

¹ Published 1865.

which Flammarion, Le Dantec, Grasset, Leduc, Wallace, Ray Lankester, Haldane, Whetham, Soddy, Lodge, Wells, Slosson, Jeans and Eddington are familiar names. Popular scientific lectures for the people, such as those of Huxley to the working classes or the "Saturday Lectures" at Washington, D.C. (1882), became fashionable. During 1866-1902, in fact, up to his death, Virchow edited a serial comprising scientific lectures to be "understood of the people" (*Sammlung gemeinverständlicher wissenschaftlicher Vorträge*). The number of popular books on medicine and biology is legion. Dry husks to chew are sometimes dispensed by the movies or radio. But it is still a far cry from Joseph Cook or Jules Verne to Huxley's Piece of Chalk or Willard Gibbs on Multiple Algebra.

In the highly artificial civilization of 18th Century France, there was a deliberate, and by no means ungenial attempt to popularize science as a cult among the more intellectual members of polite society. The aim was to prepare the ground for enlightenment, to accelerate the credited perfectibility of the human species by the creation of a sympathetic audience. The supply of such literature implied, not so much a demand, as a receptive spirit, like that accountable, a little later, for the spontaneous appreciation of Beethoven's music by the *élite* of Vienna. Molière's *Les Femmes Savantes* is not a farce, but a true picture of 17th Century manners. In Molière's time, it was no shame but rather a matter of emulation for a lady of fashion to be a bluestocking. On the eve of the French Revolution, André Chenier satirizes Mme. du Genlis (daughter of Louis XIV and Montespan) for her schoolmarm attitude toward her social equals—

"J'arrive d'Altona pour vous apprendre à lire."

But the concern of fashionable bluestockings was not science but polite literature. Newton, Harvey, Sydenham, Descartes were little known or appreciated until the 18th Century, when science began to come into its own and got its innings, if not its ultimate stride. The prime-

mover of this change in France was Fontenelle,² Perpetual Secretary of the Académie des Sciences and the logical precursor of Voltaire, very much as Darwinism culminated in Nietzsche.

Fontenelle was born at Rouen on February 11, 1657 and came within a month of dying a centenarian (January 9, 1757). His father was an advocate, his mother a sister of the poet Corneille. Bred to the law, young Fontenelle lost his first case, probably as a pretext for taking up literature, which ran in the family. All his plays and operas were flat failures on the stage; his pastorals and amatory verses merely insignificant specimens of the affected fripperies of the period. In the memorable judgment of Swinburne about the literature of the dying century, "they are not simply dull; they are null." In *Lettres galantes*, Fontenelle even made a bid for coin and kudos by playing up to the growing corruption of the time. A young wife, clandestinely married, is counselled to profit by her dual rôle in a manner adjudged *saugrenu* by actual patrons of frivolity themselves. As whilom editor of the vapid *Mercure galante*, Fontenelle, the canny, provincial Norman, was the laughing stock of all clever people in Paris. It was not until 1683, that he found his true vein and established his reputation by his *Dialogues of the Dead*; a reputation considerably enhanced, three years later, by his *Conversations on the Plurality of Worlds* (1686). With characteristic Norman shrewdness, Fontenelle had remained in his native Rouen until his Parisian success was assured. He now went up to Paris to publish his *History of Oracles* (1687), which occasioned ominous rumblings, both in philosophic and theological circles. His thesis is to deny

² The best full-length biography of Fontenelle is that of Louis Maigrón (Paris, 1906). A briefer eulogy was published at Paris in 1847 by the physiologist M. J. P. Flourens, who was his sole successor in the unique office of Perpetual Secretary to the Academy of Sciences. As an all-round literary estimate, the *causerie* of Sainte Beuve (*Causeries du Lundi*, III, 314-335) still remains unsurpassed. For the loan of these and of other volumes from the collective Œuvres of 1757, I am indebted to the kindness of Professor Chinard, of the Johns Hopkins University.

that oracles were of supernatural origin and that they ceased to function after the birth of Christ. In this book, the most favorable specimen extant of his clear, precise mode of expression, Fontenelle definitely established his position as a scientific writer, in other words, as an 18th Century rationalist. As Sainte Beuve observed, there were two Fontenelles: the one, an affected 17th Century *bel esprit*, who wrote faded, insipid pastorals of the type ridiculed by Molière; the other the serious, impersonal disciple of Descartes, who had outgrown these fripperies, and become, incidentally, the ablest expounder and recorder of science in his time and place. In the face of the determined opposition of Boileau and Racine, Fontenelle now gained entry to the French Academy, later to the Academy of Inscriptions and the Academy of Sciences (1697), of which he was made Perpetual Secretary in 1699. The day after his appointment, he set to work upon the great History of the Academy of Sciences, the permanent record of its transactions, of which the initial volume appeared under his editorship in 1702. To pure science, Fontenelle contributed a Geometry of the Infinite and an Apology for (Cartesian) Vortices. Of the former, he observed that it could be understood by eight Europeans only, and "the author is not one of the eight." His most solid contributions are his prefaces to the History of the Academy and his Eulogies of its deceased members. These are remarkable for simple, accurate presentation of fact, notably of the essential argument of Newton's *Principia*. Fontenelle wrote 17 eulogies of deceased medical men, who were members of the Academy, and as these have never been indexed by medical bibliographers, the pagination in his *Œuvres* (Paris, 1767, V-VI) is subjoined, viz:

Claude Bourdelin (1621-99), V, 48-50; Daniel Tauvry (1689-1701), V, 50-54; Adrian Tuillier (1674-1702), V, 54; Denis Dodart (1634-1707), V, 190-210; François Poupart, V, 252-258; Claude Bourdelin (1667-1711), V, 312-318; Claude Berger (1679-1712), V, 319-322; Louis Morin (1635-1715), V, 380-389; Nicolas Lemery (1645-1715), V, 389-406; Guy-Crescent Fagon (1638-1718), VI, 34-36; Jean Mery (1645-1722), VI, 168-181; Alexis Littre (1658-1725), VI, 248-261; Guichard-Joseph du Verney (1648-1730), VI, 448-464; Estienne-François Geoffroy (1672-1731), VI, 487-500; Frederic

Ruysch (1638-1731), VI, 501-518; Pierre Chirac (1650-1732), VI, 524-544; Herman Boerhaave (1668-1738), VI, 601-623; also an eulogy of the medical botanist Joseph-Pitton de Tournefort (1656-1708), V, 210-232.

In the end, Fontenelle made himself the most popular and respected Parisian of his period, through his urbanity, his social tact and finesse, his wit and sense. While gallant, assiduous and flirtatious with women, he was esteemed cold and heartless, incapable of passion or sentiment, by those in the know. The reason for all this is not far to seek. In his childhood, he had exhibited consumptive tendencies, spat blood when excited, and had to cope all his life with bouts of hæmoptysis. To ward off permanent invalidism, he therefore deliberately shut out of his life all sources of worry and emotional excitement, until settled habit became second nature. Like the bored lady in the Russian novel, his watchword was: *On veut troubler ma vie*. In keeping with this aristocratic social poise and self-possession, he smiled occasionally, but never laughed, cried or got angry. That he should have lived to be a hundred under this studious régime constitutes a triumph for the disciples of Cornaro. Fontenelle's case illustrates the dictum of Allbutt that health is really a diathesis, like tubercle or syphilis, and is more popular than the rest simply as being the most viable and useful. A life regulated by régime, said La Rochefoucauld, is but a tedious mode of disease. But, as in Lord Bacon's case, Fontenelle was saved from any misgiving or repining by the mental indifference, the "minimum of intellectual eagerness," which goes with lowered vitality. Thus he attained to cold, clear thinking, well-poised, unbiased judgment, utter detachment from prejudice, *parti pris* and narrowminded clansmanship, thence to balance and precision in writing; and, like Goethe and Landor, declined to be at odds with any man. The same impersonal poise, the same accuracy of perception, is noticeable in all the great philosophers of celery stalk vitality, from Spinoza to Kant, from Locke to Stuart Mill and Emerson. The high spots of Fontenelle's wit are his reference to the valetudinarian aspect of his personal purity (*quelquefois le matin*) and his well

known assertion that were all essential truths contained within the hollow of his hand, he would take care never to open it.³ He winds up his eulogy of Newton by stressing the large fortunes left by Newton and Leibnitz as a fact of unique respectability and distinction in the total history of science. He himself died passing rich on 21,000 livres (\$5000) income, 80,000 livres ready money, a furnished house and a fine library; all acquired from royalties on his writings alone.⁴ As Fontenelle grew older, he became more and more enamoured of tranquillity, declined titles, dignities and honors, and would accept naught but a lodging in the Palais Royal from the Regent himself. When offered the Perpetual Presidency of the Academy of Sciences, he exclaimed: "Ah! do not deprive me of the comfort of being on equal terms with my fellows!" His trait of treating every woman he met as if she were, for the time being, the only person in the world, insured him a large following of female admirers and his domestic interior never lacked the feminine touch. A French refugee who visited him in 1733, records:

"M. de Fontenelle is magnificently housed; he seems much at his ease, richly endowed with Dame Fortune's gifts. Advanced as he is, in years, the glance of his eyes is lively and subtle. One can see that Nature fashioned this great man for a pleasurable existence."⁵

In such wise, Fontenelle kept his state. Even at this long stretch of time, his name connotes the faint aroma, the faded charm of the pre-Revolutionary period. He was a past master in the 18th century art of living well.

Fontenelle's three principal contributions to popular science are established values in the history of French literature, too well known to need gratuitous comment. The *History of Oracles* conveys the substance of a Latin

³ Si j'avais la main pleine de vérités, je me garderais bien de l'ouvrir.

⁴ That Fontenelle should have made so much money by the few books he published is proof positive that the purpose of the *Aufklärung* had been achieved: to spread general enlightenment by creating a receptive spirit for it.

⁵ Cited by Sainte Beuve, *op cit.*, 332.

dissertation in the simple, lucid manner he had made his own. In his *Plurality of Worlds*, an exposition of Cartesian astronomy transpires in the course of a flirtation with a marquise in an 18th century park. In this *genre*, as in his *Dialogues of the Dead*, he had mastered the literary form initiated by Plato, sophisticated by Lucian and modernized by Landor and Leigh Hunt. Like Lucian and Landor, Fontenelle makes his philosophic points by bringing celebrities of disparate type into imaginary conversations. The subjoined versions illustrate his gift of light-footed irony, his wide culture, his feeling for the tone of polite society—

“Glissons, mortels, n'appuyons pas.”

Erasistratus twits Harvey because his great discovery does not help the sick. Raymond Lully convinces Artemisia that the twain of them are a pair of glorious humbugs. A very 18th Century sort of Molière ridicules the mysticism of Paracelsus. Erasmus maintains that the hereditary rank and possessions of Charles V were mere bits of luck, but Charles gets the better of it, in the end, by insisting that mental ability is innate and therefore equally dependent on blind chance. In these slight performances, there is already a trace of the acidulous quality of *Candide*, *Zadig*, *Micromégas*, of D'Alembert's conversation with Mlle. de l'Espinasse about the mysteries of generation, of the deification of cold reason, the heartless elegance, the refined scepticism and the other dissolving forces implicit in the Revolution.

I

ERASISTRATUS AND HARVEY

ERASISTRATUS:

Your teaching is marvellous. What! The blood circulates in the body? The veins carry it from the extremities to the heart, and it leaves the heart to enter the arteries, which carry it back to the extremities?

HARVEY:

I have done so many experiments to prove it that nobody can doubt it any further.

ERASISTRATUS:

Then we physicians of antiquity fooled ourselves finely when we thought

the blood has only a very sluggish flow from the heart toward the extremities of the body, and mankind is indebted to you for abolishing this ancient error!

HARVEY:

I claim as much; indeed, humanity is even further in my debt, since I set the pace for all these fine discoveries they are now making in anatomy. Once I had discovered the circulation of the blood, it remained for others to find a new conduit, a new canal, a new reservoir. It is just as if the body had been made over again. See what an advantage our modern medicine must have over yours! You wanted to heal the ailments of the human body without knowing anything about its workings.

ERASISTRATUS:

I admit that the moderns are better physicists than we were; they know more about the ways of nature, but they are not better physicians. We healed the sick just as well as they do. I'd like to have seen you moderns, you in particular, trying to cure Prince Antiochus of his quartan fever. You know how I went about it, how I found out from the way his pulse leaped up when he saw Stratonice, that he was in love with that fair queen, so that his illness came from the violent efforts he made to conceal his passion. Nevertheless I made a cure in that difficult and important case without knowing that the blood circulates. And I believe that, with all the aid this knowledge might have given you, you would have been flustered no end in my place. It was not a question of new conduits or new reservoirs; what was important in the case of this patient was the state of his heart.

HARVEY:

It is not always an affair of the heart, and not all patients are in love with their stepmothers, like Antiochus. I have no doubt that ignorance of the circulation of the blood has caused you to let many patients die on your hands.

ERASISTRATUS:

What! You really believe your new discoveries are so useful?

HARVEY:

Assuredly.

ERASISTRATUS:

Then answer, if you please a little question I am going to put. Why do we see every day as many dead souls arrive in these parts as ever?

HARVEY:

Oh! When they die, it is their fault, and no longer the fault of their doctors.

ERASISTRATUS:

But this circulation of the blood, these conduits, these canals, these reservoirs—all these things cure nothing then?

HARVEY:

We have not yet perhaps had leisure enough to put what we have learn-

ed in so short a time to any practical use; but it is inevitable that a rich harvest will be reaped from it all in time.

ERASISTRATUS:

My word for it, nothing will be changed. Look you, there is a certain amount of useful knowledge, which men soon acquire, to which they have added little and which they can hardly dispense with, even if they ignore it. They owe this debt to nature, that it has promptly inspired them with all they need to know; for had they trusted to their own slow perceptions to find it out, they would have been lost. As for the other things, that are not so essential, they will be discovered little by little and through long successions of years.

HARVEY:

It would be very strange indeed if a better knowledge of man's nature did not make us better doctors. For that matter, why amuse ourselves in perfecting our knowledge of the human body? It would be better worthwhile to drop it altogether.

ERASISTRATUS:

Then people would lose a fund of very agreeable knowledge; but as far as actual utility is concerned, I believe that to discover a new conduit in the body or a new star in the sky, are about of equal importance. Nature has willed it that at certain intervals of time, men should succeed one another through the fact of death. It is given them to defend themselves against it up to a certain point: but, beyond that, it is idle to make new discoveries in anatomy, it is useless to penetrate more and more into the secrets of the human body. Men cannot cheat nature; they will go on dying just as usual.

II

ARTEMISIA AND RAYMOND LULLY

ARTEMISIA:

That is entirely new to me. You say there is a secret for changing metals into gold and that this secret is called the philosopher's stone or *opus magnum*?

RAYMOND LULLY:

Yes, I once looked for it a long time.

ARTEMISIA:

Did you ever find it?

RAYMOND LULLY:

No, but everybody believed I did and still believe it. But as a matter of fact that secret was only a humbug.

ARTEMISIA:

Why, then, did you look for it?

RAYMOND LULLY:

I did not know better until I got down here.

ARTEMISIA:

It seems to me you had to wait a long time to undeceive yourself.

RAYMOND LULLY:

I see you want to chaff me. But we are more alike than you think.

ARTEMISIA:

I, like you? I, who was a model of wifely fidelity, who drank my husband's ashes and put up a superb monument to him, which was admired by the whole world: how could I resemble a man who has spent his whole life looking for the secret of changing metals into gold?

RAYMOND LULLY:

Quite so. I know whereof I speak. After all the fine things you have just been bragging about, you went crazy over a young man who didn't care a straw about you. For him you sacrificed the magnificent building that made you so famous, and the ashes of Mausolus you swallowed, were a feeble remedy against a new passion.

ARTEMISIA:

I never credited you with being so well versed in my affairs. That passage in my life was so well covered up that I never dreamed that many people knew about it.

RAYMOND LULLY:

You admit, then, that our destinies are alike, in that people have given us both credit for what we didn't deserve. You, they credited with having been always faithful to the shade of your husband and me with having got to the bottom of the Great Secret.

ARTEMISIA:

I grant it willingly. The public was made to be humbugged by lots of things. We must take advantage of things as they are.

RAYMOND LULLY:

But isn't there some other trait of resemblance between us two?

ARTEMISIA:

Up to this moment, I find it pleasant enough to be like you. Say on.

RAYMOND LULLY:

Have we not, both of us, looked for a thing we could not find: you for the secret of being faithful to your husband; I for that of changing metals into gold? I believe that wifely fidelity is like the *opus magnum*.

ARTEMISIA:

There are people who have such a low opinion of womankind, that they would regard the Great Secret as nothing in comparison.

RAYMOND LULLY:

Oh, I will guarantee that it is as difficult to get at as need be.

ARTEMISIA:

But how does it come that people look for it and that you, yourself, who seem to be a sensible man, should have chased this phantom?

RAYMOND LULLY:

It is true that no one can find the philosopher's stone, but it is advantageous to look for it. In seeking it, one uncovers, by the way, many fine secrets one was not looking for.

ARTEMISIA:

Is it not better to look for secrets that can be found than to brood over those we shall never find?

RAYMOND LULLY:

Every science has its chimæra, which people run after and never capture; but they acquire, by the way, much useful knowledge of other things. Grant that chemistry has its philosopher's stone, geometry its circle-squarers, astronomy its true meridians of longitude, mechanics its perpetual motion; it may not be possible to find all that, but it is very useful to look for it. I speak a language that you may perhaps not understand well, but you will understand, at least, that morality, too, has its chimæra: which is disinterestedness, perfect friendship. No one ever encounters it, but it is good to pretend that one does. In pretending, at least, one attains to many other virtues or to praiseworthy and estimable actions.

ARTEMISIA:

Once more, I am of opinion that we should let chimæras go hang and look only for what is real.

RAYMOND LULLY:

Can you believe that? In every way people have set up for themselves an ideal of perfection quite beyond their attainments. They would never set out on a journey if arriving at their destination was all there is to it; they must have before their eyes some imaginary goal which keeps them going. If any one had told me that chemistry would never teach me how to make gold, I should have dropped it. If any one had said to you that your parade of extreme fidelity to your husband was unnatural, you would never have troubled yourself to honor the memory of Mausolus with such a magnificent tomb. We should lose our courage if we were not bolstered up by false ideas.

ARTEMISIA:

It is not for nothing then that people deceive themselves?

RAYMOND LULLY:

How? Not for nothing! If Truth, by ill chance, were to reveal herself as she is, all would be lost; but she seems to realize how important it is to keep herself fairly well concealed.

III

PARACELSUS AND MOLIÈRE

MOLIÈRE:

If only on account of your name, I should be charmed with you, Paracelsus. One would take you for some Greek or Roman. It would never occur to any one that Paracelsus was a Swiss philosopher.

PARACELSUS:

I have made that name as famous as it is fair. My works are of great assistance to all who would penetrate the secrets of nature, particularly to those who have got to know about genii and elemental beings.

MOLIÈRE:

I can easily see that those are true sciences. To know the people one sees every day is nothing; but to know about genii one never sees, that is quite another matter.

PARACELSUS:

Undoubtedly. I have given very exact information as to their nature, their activities, inclinations, their different varieties and the powers they wield in the universe.

MOLIÈRE:

How happy you must feel to be so enlightened. For it is all the more probable that your knowledge of man himself must be perfect; yet many have never been able to get even that far.

PARACELSUS:

Oh! There is hardly any little philosopher who hasn't got that far.

MOLIÈRE:

I can well believe it. You are not then embarrassed by anything about the human soul, its functions, its union with the body?

PARACELSUS:

Frankly, there will always be certain difficulties about these matters, but, anyhow, we all know what philosophy has to teach about them.

MOLIÈRE:

And nothing more?

PARACELSUS:

No. Isn't that enough?

MOLIÈRE:

Enough! It is nothing at all; and so you jump from man, of whom you know nothing, to a knowledge of genii.

PARACELSUS:

Genii have about them something more likely to pique our natural curiosity.

MOLIÈRE:

Quite; only it is unpardonable to dream of them until we know all there is to know about human nature. It would seem as if the human mind had covered everything when it begins to set up illusory scientific problems to worry about, whenever it takes the notion. It is certain, however, that very real questions would keep it as busy as it might wish to be.

PARACELSUS:

The mind naturally neglects the simple sciences and runs after those that are mysterious. Upon them alone can it exert its full force.

MOLIÈRE:

So much the worse for the mind, then. What you tell me is entirely to its discredit. Truth presents itself, but because it is simple, the mind does not recognize it and prefers silly mysteries merely because they are mysterious. I am convinced that if most people saw the universe just as it is, and noticed that there are no virtues in numbers, no qualities attaching to planets, no fatalities bound up with periods of time or revolutions, they could not help saying about this admirable order of things: What! is that all?

PARACELSUS:

You ridicule mysteries into which you have not penetrated and which, in fact, are reserved only for great men.

MOLIÈRE:

I think more highly of those who do not understand such mysteries than of those who do; but Nature, alas! has not made every one incapable of understanding them.

PARACELSUS:

But you, who decide things with so much authority, what profession did you follow during your lifetime?

MOLIÈRE:

A profession very different from your own. You studied the virtues of geni and I the stupidities of mankind.

PARACELSUS:

A fine study, indeed; as if it were not self-evident that people are prone to stupidity.

MOLIÈRE:

It is a very general, confused sort of knowledge, but when one goes into details, one is surprised at the extent of the science.

PARACELSUS:

But, after all, what use did you make of it?

MOLIÈRE:

I brought together as many people as I could in a certain place and made it plain to them that they were all dolts.

PARACELSUS:

It must have taken a lot of talking to convince them of that fact.

MOLIÈRE:

Nothing easier. We make them realize their foolishness without any great flights of eloquence or carefully prepared arguments. What they do is so ridiculous that you have only to do the same thing before their eyes to make them split with laughter.

PARACELSUS:

I see; you are a comedian. For my part, I cannot conceive what pleasure people find in comedy. They go to laugh at manners on the stage. Why not laugh at the real things in actual life.

MOLIÈRE:

To laugh at things in the world, you have to be outside it and comedy puts you there. It presents a spectacle just as if you had no part in it yourself.

PARACELUS:

But people go back at once to the life they were laughing at and take up their old places in it.

MOLIÈRE:

Absolutely. The other day, to amuse myself, I made a fable about the matter. A young goose was flying in the ungraceful manner of his kind when they fly and while flying just a foot above the ground, he insulted the rest of the barnyard. Unhappy animals, said he, I see you beneath me, nor can you cleave the air as I do. The mockery was brief. The goose flopped to the ground at that very moment.

PARACELUS:

What good then are the observations made in comedies, if like your goose, people at once fall back into their commonplace stupidities?

MOLIÈRE:

There is a lot in making fun of oneself. There Nature has given us facility, to prevent us from being the dupes of ourselves. How often does it happen that one part of us does something with zeal and ardor while the rest of us makes fun of it? And if it were ever necessary, there would probably be a party of the third part, who would make fun of the other two. Does it not look as if man were made up of related pieces?

PARACELUS:

I don't see that all that calls for unusual mental effort. A few light reflections, a few ill-founded pleasantries do not merit much esteem; but what severe mental effort is necessary to consider higher subjects!

MOLIÈRE:

You to your genii, I to my dolts; and yet, although I have only worked upon subjects open to all the world, I predict that my comedies will live longer than your sublime writings. Everything is subject to change of fashion, the products of mind as well as customs. I have seen I know not how many books and modes of writing buried with their authors, just as some people buried with their dead the things most precious to them in life. I am perfectly aware of the revolutions that may occur in the empire of letters, yet I guarantee that my plays will last. I know why. He who would picture things for all time should depict stupid people.

IV

CHARLES V AND ERASMUS

ERASMUS:

Make no mistake about it. If there were degrees of rank and station among the dead, do you think I would give you precedence?

CHARLES V:

What! a grammarian, a savant, and, to give your merits more than they deserve, a clever man pretends to be of more consequence than a prince who was once master of the better part of Europe?

ERASMUS:

Add even America, and it will not make you seem more fearsome. All this grandeur of yours was nothing more than a combination of lucky chances, so to speak; and if it could be split up into its components you would see it clearly. If your grandfather Ferdinand had been a man of his word, you would have had next to no hold on Italy; if other princes than he had had sense enough to believe in the antipodes, Christopher Columbus would never have applied to him and America would not be part of your kingdom; if, after the death of the last duke of Burgundy, Louis XI had known what he was about, the heiress of Burgundy would not have married Maximilian and the Low Countries would not have been yours; if Henry of Castille, brother of your grandmother Isabel, had not been a subject of scorn among women, or if his wife had not been of doubtful virtue, the daughter of Henry would have passed as his daughter, and the kingdom of Castille would have escaped you.

CHARLES V:

You make me tremble. I feel as if I were losing Castille or the Low Countries or America or Italy at this moment.

ERASMUS:

Don't joke about it. Neither a little good sense, on the one hand, nor a little good faith, on the other, could help you much. All you needed was the impotence of your great uncle and the coquetry of your great aunt. See, what a delicate edifice lies at the base of things turning upon luck.

CHARLES V:

Verily, it is impossible to stand an examination as severe as yours. I avow that you reduce my grandeur and my titles to nothingness.

ERASMUS:

Such however, were the things upon which you plumed yourself. It was easy to strip you of them. Do you remember about the Athenian Cimon, who having taken a number of Persians prisoners, exposed their clothing for sale, on the one hand, and themselves naked, on the other, which produced a bargain counter jam over the magnificent costumes with blank indifference as to their owners. I verily believe that what happened to those Persians would happen to many other people, if their personal merits were dissociated from the gifts of fortune.

CHARLES V:

But what is this personal merit?

ERASMUS:

Is it necessary to ask? It is whatever is within us. The scientific spirit, for example.

CHARLES V:

And it is reasonable to make that a title to fame?

ERASMUS:

Without doubt. Those are not gifts of fortune, like wealth or patents of nobility.

CHARLES V:

What you say surprises me. Do not sciences appertain to scientific men as riches to the wealthy? Are they not transmitted by way of succession? You learned men inherit from the ancients as the rest of us from our fathers. If they left us what they possessed, you inherited what you know; whence many scientific men regard what they have received from the ancients with the same respect that others regard their lands and their ancestral homes, in which it would vex them to have anything changed.

ERASMUS:

But the great were born inheritors of the grandeur of their fathers, while scientific men did not inherit the knowledge of the ancients. Science is not a matter of succession; it is something which each must acquire anew, or if it be a succession, it is difficult enough to acquire in an honorable manner.

CHARLES V:

Ah well! match the trouble it takes to acquire the things of the mind with the difficulty of retaining the gifts of fortune, and you will find them about equal; if it is only a question of difficulty, worldly affairs are often quite as troublesome as closet speculations.

ERASMUS:

But never mind science, let us stick to mind. That benefit is never a matter of luck.

CHARLES V:

You think so? What! Does not mind depend upon a certain conformation of the brain, and is there less luck in being born with a good brain than in being born the son of a king? You are a great genius; but ask all the philosophers why you were not born dull and stupid; it depended on nothing more than a minute disposition of fibres, upon a phase of finer anatomy which we shall never be able to perceive, and in the face of that fact, these witty gentlemen dare to maintain that they alone are independent of chance and so entitled to despise other men.

ERASMUS:

You think then, that to be rich or to have brains is equally meritorious.

CHARLES V:

It is luckier to have brains; but, at bottom, it is always a piece of luck.

ERASMUS:

Luck, then, is everything.

CHARLES V:

Yes, provided the term is applied to something we don't know. I leave you to judge whether I have not stripped men down more effectively than you. You only take away certain advantages of birth. I have wiped out mental capacity. If before being vain about anything, men could be certain of what really belonged to them, there would be hardly any vanity left in the world.

F. H. GARRISON.

